

**Before Operating Your Tools,
Please Read This Instruction Carefully**



Compact Benders

**ITEM NO.61-251-132
MODEL NO. #CBF1/CBB1**

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Specifications

Characteristic	Value
Height	38°
Mild Steel Capacity	5/16"×1 1/4" or 1/4"×2"
Right Angle Bending Capacity	3/16"×1-4" or 1/4"×1-1/4"
Center Pin Capacity	1-4" Thick(Use 1" die for greater.)
Solid Rod Capacity	1/2"(Use 3" die)
Die Sizes	1", 1 1/4", 1 1/2", 1 3/4", 2", 2 1/2", 3"

SAFETY WARNINGS & CAUTIONS

1. Keep Work Area Clean.

Cluttered areas invite injuries.

2. Keep Children Away.

All children should be kept away from the work area. Don't let them handle the toll.

3. Do Not Operate The Toll If Under The Influence Of Alcohol Or Drugs.

Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to operate.

4. Avoid Moving Parts During Operation.

Keep fingers and hands away from all moving parts.

5. Use Eye Protection.

Wear ANSI approved impact safety goggles.

6. DRESS SAFELY.

Protective gloves and non-skid footwear or safety shoes are recommended when working with and operating the toll. Don't wear loose clothing or jewelry. They can get caught in moving parts. Also, wear a protective hair covering to prevent long hair from getting caught in the tool.

7. Don't Overreach.

Keep proper footing and balance at all times.

8. Stay Alert.

Watch what you are doing. Use common sense. Do not operate any toll when you are tired.

9. Replacement Parts And Accessories.

When servicing, use only identical replacement parts. Only use accessories intended for use with this tool. Accessories are available from Harbor Freight Tools.

10. Store Idle Equipment.

When not in use, the tool should be stored in "closed" position.

11. Secure Stand.

Make sure the unit is securely mounted to a stable surface before using.

12. Do Not Exceed The Capacity Of The Unit.

Do not use cheater bars or extend the handle with any other devices.

13. Check All Pins Before Use.

Make sure all pins are inserted all the way.

14. Make Sure Stock Is Of Sufficient Length.

Stock must extend far enough beyond the Stop Block & Forming Die so as not to slip and cause injury.

UNPACKING

If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual.

PART #	DESCRIPTION		PART #	DESCRIPTION	
1	Long Hitch Pin	2	14	3/8"Nut	4
2	Short Hitch Pin	1	15	3/8"x5-1/4"Mounting Bolt	1
3	Square Stop Block	1	16	3/8"x7/8"Mounting Bolt	2
4	Stop	1	17	1"Die	1
5	Support Pin	1	18	1 1/4"Die	1
6	Ring Assembly Spacer	1	19	1 1/2"Die	2
7	Right Angle Bending Attachment	1	20	1 3/4"Die	1
8	Inner Handle	1	21	2"Die	1
9	Outer Handle/Die Receiver	1	22	2 1/2"Die	1
10	Ring Assembly/Die Receiver	1	23	3"Die	1
11	Stand	1	24	3/8"Washer	1
12	Handle Pin and Hair Clip	1	25	3/8"x1-3/8"Mounting Bolt	2
13	Mounting Spacer	3			

OVERVIEW

Your new Compact Bender is designed to make bends in flat, square or round solid metal. It may be used to create sign letters, anchor bolts, U bolts, pipe clamps, handles, and more. It is light weight enough to be used as a portable bender on trucks or trailers

ASSEMBLY

- Step 1: Bolt the STAND(#11) to a stable surface.
- Step 2: Place the three MOUNTING SPACERS(#13) over the three holes on the top of the STAND as shown in Figure 1.
- Step 3: Place the RING ASSEMBLY/DIE RECEIVER (#10) over the three MOUNTING SPACERS and secure using the two BOLTS (#16) and two NUTS (#14).
- Step 4: Place the RING ASSEMBLY SPACER(#6) between the back two holes of the RING ASSEMBLY and secure the entire assembly to the STAND using the MOUNTING BOLT (#15) and remaining NUT(#14).
- Step 5: Place the HANDLE DIE RECEIVER(#9) between the ASSEMBLY SPACER DIE RECEIVER and secure in place using the LONG HITCH PIN (#1) as shown in Figure 2.

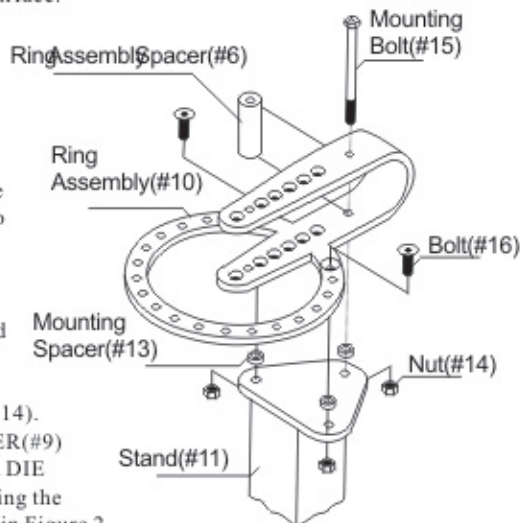


Figure1- Assembly

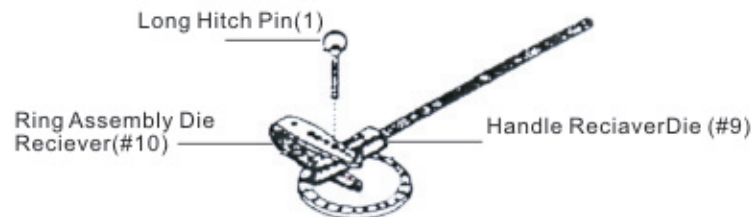


Figure2- Assembling Handle

OPERATION

Using the Stop Block

- Step 1: The STOP BLOCK (#3) holds the workpiece in place while the selected bending DIE (#17-#23) on the HANDLE (#9) bends it around the LONG HITCH PIN (#1) or selected center DIE as shown in Figure 3. The workpiece will bend in the shape of the bending DIE around the LONG HITCH PIN (or center DIE). See Figure 3.

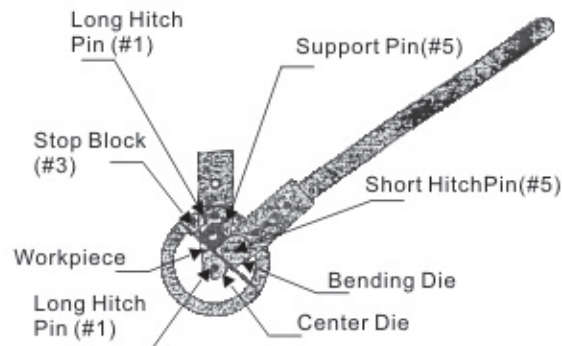


Figure3-Using Stop Block

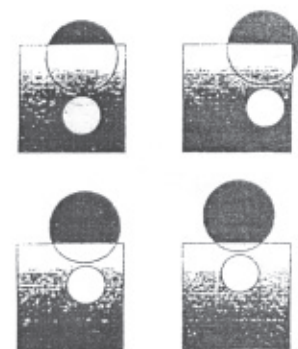


Figure4-Position Of Stop Block

- Step 2: The STOP BLOCK and center DIE are secured using two LONG HITCH PINS. The bending DIE is secured using one SHORT HITCH PIN (#2). The center DIE is always secured in the outermost holes of both DIE RECELVERS.
- Step 3: The SUPPORT PIN(#5) is use to raise the level of the STOP BLOCK so that it is even with the center DIE.
- Step 4: The STOP BLOCK must be positioned in one of four ways. See Figure 4[see page #6]. Always position the STOP BLOCK so that it is as close as possible to the center DIE while still allowing for the thickness of the stock.
- Step 5: The stock must be positioned between the center DIE and both the bending DIE and a flat face of the STOP BLOCK.
- Step 6: The STOP BLOCK & SUPPORT PIN must be moved away from the center die to accommodate thicker materials, and closer for thinner stock.
- Step 7: The bending DIE is usually secured in the third hole in the of the HANDLE DIE RECEIVER, though this may vary depending upon the thickness of your stock.

Using The Right Angle Bending Attachment

Step 1: Attach the RIGHT ANGLE BENDING ATTACHMENT(#7) as shown in Figure 5.

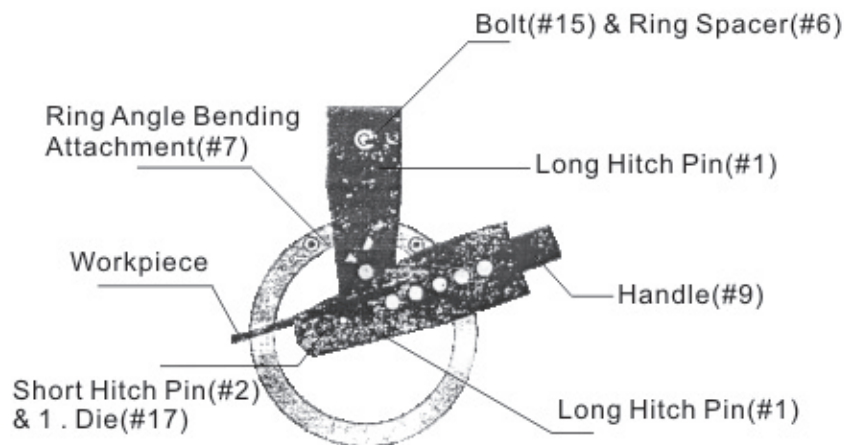


Figure5 - Using Angle Bending

Step 2: If the HANDLE(#9) will hit the stock due to its length, position the stock to the left of the HANDLE.

Step 3: HANDLE is always pulled clockwise.

Step 4: Draw lines with chalk on your stock at every desired interval prior to bending.

Step 5: If you are making two or more bends, on the same piece of stock, add an additional 1/8" inch (according to the inside dimension measurement) between each line. This will accommodate distance lost due to the bending.

Step 6: Position chalk line on the edge of the RIGHT ANGLE BENDING ATTACHMENT so that only 1/2 of the line is visible.

Step 7: Bend to the desired angle. Use a protractor for precise measurements.

Step 8: For complex operations, use cheaper stock as test material before using more expensive materials.

Adjustable Stop

Step 1: The ADJUSTABLE STOP(#4) is used when engaging in operation that require the same angle to be bent repetitively.

Step 2: Set up the Bender as described above.

Step 3: Using a protractor, determine the desired bending angle.

Step 4: Install the ADJUSTABLE STOP in the required hole of the RING ASSEMBLY(#10) to achieve the determined angle.

MAINTENANCE

Regular lubrication will help lengthen the life of the your Bending Brake.

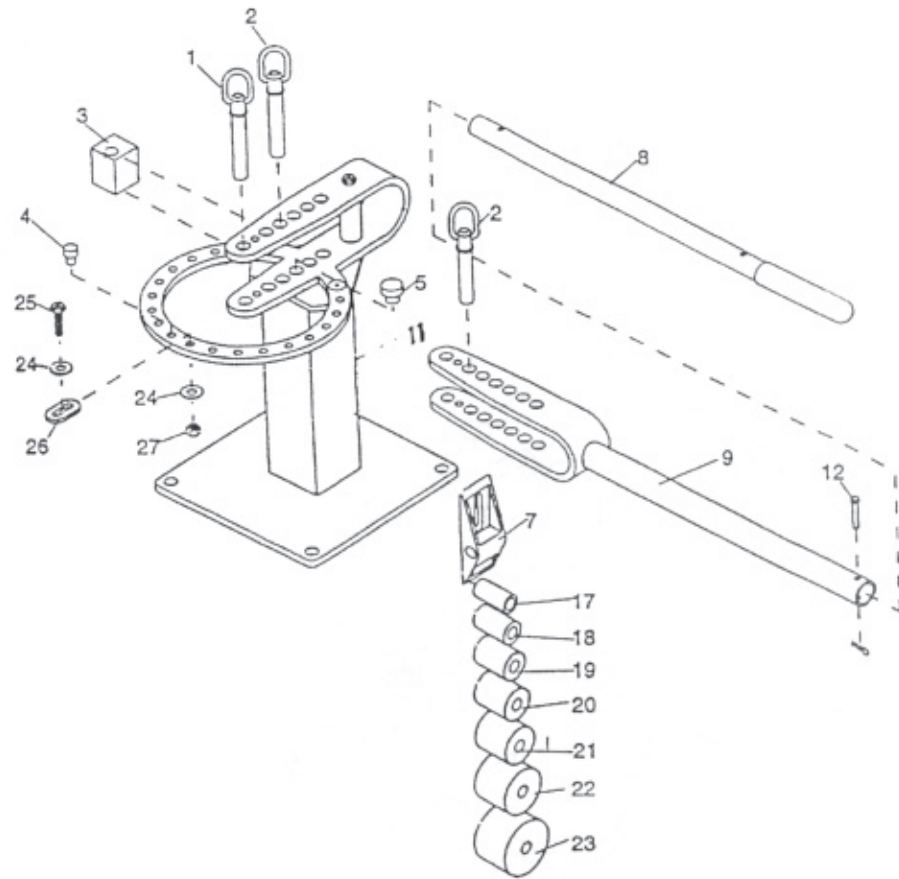
Always inspect the tool before use for damaged parts. Replacement parts may be purchased through Harbor Freight Tools.

Parts List

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Parts Drawing

● Exploded View -A



● Exploded View -B

